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ABSTRACT

Chapter One of the Education Consolidation and Improvement Act (ECIA) distributes compensatory education grants on the basis of a formula that considers population and cost factors for each of the nation's 3,128 counties. The focus of this report is the effectiveness of that formula in meeting the stated purpose of the legislation to provide aid for educationally disadvantaged children, defined as those who are economically deprived. The study, using a specially constructed computer model of the funding formula, projects allocations for all counties through 1987 and examines the distributional effects of proposed formula modifications. Among the findings are an inverse relationship between proportionate concentrations of economically disadvantaged youngsters and allocations per eligible child. The formula calculates the entitlement for each county by multiplying the number of eligible children by an education cost factor specific to the state in which the county is located. Most states with low per pupil expenditure also have low per capita income--an indicator of limited government fiscal capacity. To address the gap between the expressed intent and the implementation of the legislation, three alternative modifications are suggested. Tables and figures accompany the text. (MLF)

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AN ANALYSIS OF THE ECIA CHAPTER ONE FORMULA FOR ALLOCATING COMPENSATORY EDUCATION GRANTS TO LOCAL EDUCATION AGENCIES

by Ronald E. Bird

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EXECUTIVE SUMMARY

Grants to state and local education agencies to support compensatory education represent the largest single category of federal aid to education. Three billion dollars were distributed in fiscal year 1983 under Chapter One of the Education Consolidation and Improvement Act (ECIA)--80 percent of them to local education agencies on the basis of a formula which considers population and cost factors for each of the nation's 3,128 counties.

The focus of concern of this report is the effectiveness of that formula in meeting the stated purposes of the legislation. The intent of the law is to provide enriched educational experiences for educationally disadvantaged children "in recognition of the special educational needs of children of low-income families and the impact that concentrations of low-income families have on the ability of local educational agencies to support adequate educational programs." By defining "educationally disadvantaged children" as those who are economically deprived, the legislation provides both a rationale for the federal government's involvement in compensatory education and the guidelines by which funds are distributed.

Since the link between educational disadvantage and economic conditions of the local community is clearly an integral part of the rationale for federal policy in the compensatory education field, it is used here as the context for interpreting and evaluating the formula by which funds are distributed under ECIA Chapter One. At the request of its 12 member states, the Southeastern Regional Council for Educational Improvement conducted a study of the ECIA Chapter One funding formula, using a specially constructed computer model. The model made it possible to project allocations through the county level for all 3,128 United States counties, through 1987 (based on various assumptions regarding budget levels), and to examine the distributional effects of proposed formula modifications.

The findings from that study include:

- The 1980 census revealed a decline in the number of children aged 5-17 living in poverty level households in the Southeast—a number which is an important element of the LEA grants formula. However, despite the declines in total numbers, the greatest absolute and relative numbers of poor children are still located in the Southeast. Of the total number of eligible children, approximately 45 percent reside in the Southeast and

Puerto Rico, 19 percent in the Northeast, 20 percent in the North Central region, and 16 percent in the West.

- Although the pattern of need--numbers and concentrations of poor children—has not changed, the relative percentage changes in grant allocations resulting from the shift to 1980 census data are significant. The changes range from gains of 14 percent* for Massachusetts, New Jersey, and New York to losses of 23 percent for Mississippi, 22 percent for South Carolina and North Dakota, and 21 percent for West Virginia. There is a clear regional pattern to the allocation shifts. Six of the ten states with the largest percentage forecast gains are located in the northern tier of industrial states. These states have been characterized by relatively high expenditures for education and above average fiscal capacities of state and local governments. Eight of the ten states with the greatest percentage losses of entitlements are located in the southeastern region.

- Despite a "hold-harmless" provision, the current formula allows a significant degree of "fiscal shock" in connection with updating. A hold-harmless provision was enacted in 1974, guaranteeing that no entitlement would be less than 85 percent of the amount received during the previous year. Although designed to protect districts from precipitous decline in program support as a result of formula and data changes, it is proving to be insufficient. Even in the first two years using the 1980 census data, the fiscal shock is likely to be significant. Alabama, for example, can expect a first year decline of 14 percent in federal compensatory education funds--a loss that cannot be replaced by state support.

- Although one of the clearly expressed intentions of the legislation is to provide federal aid to localities where there are large concentrations—i.e., large numbers in proportion to the total school age population—of poor children, the current formula has no such provision. As a consequence, there is an inverse relationship between proportionate concentrations of economically disadvantaged youngsters and allocations per eligible child.

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*All projections are for the year 1987 when the hold-harmless period is over and the full effects of the shift to 1980 census data are felt. Also, projections are based on an assumption that 1982 funding levels will hold constant.

• The current ECIA Chapter One LEA grant formula calculates the entitlement for each county by multiplying the number of eligible children by an education cost factor specific to the state in which the county is located. The relationship of that product of cost and children to the national total of such multiplications defines the share of the total available grant funds allocated to each county.

The cost factor multiplication has been interpreted in previous studies as an attempt to adjust the distribution of funds to account for real differences between states' costs of providing educational services. The cost factor used in the formula is 40 percent of each state's current per pupil expenditure amount during the most recently available year. However, no amount is entered at less than 80 nor more than 120 percent of the national average per pupil expenditure.

Many of the limitations of the formula can be traced to the reliance on per pupil expenditure data for that cost factor. For one thing, it does not make allowance for the limited fiscal capacities of areas having high concentrations of children from poverty households. In fact, most states with low per pupil expenditure also have low per capita income—an indicator of limited government fiscal capacity. States which benefit from the highest cost factors under the formula tend to be those with higher than average per capita personal income, indicative of high fiscal capacity to support education from local resources.

To address the gap between the expressed intent and the implementation of the legislation, three alternative modifications are suggested:

1. Since cost factor based on per pupil expenditure is identified as a source of mismatch between need and funds allocation, a modification of that element in the formula might be the simplest approach to improving the allocation of grants. By narrowing the percentage range for per pupil expenditures which is now used to calculate grants, allocations may be brought more closely in line with patterns of need. Currently, the cost factor is 40 percent of per pupil expenditure within a range of 80-120 percent of the national average per pupil expenditure. If the range were narrowed to 90-115 percent of the national average, the result would be a relative increase in projected grant allocations to the states with the greatest need and a decrease in the projected allocations for the states with greater fiscal capacity and proportionately fewer eligible children.

2. A second alternative modification would make use of a ratio of per capita personal income for each state to the national average per capita personal income. Each state's per pupil expenditure amount would be divided by that ratio, resulting in a shift of the projected distribution of grant monies in favor of the Southeast and some Midwest states. The logic in favor of this alternative is that it recognizes fiscal capacity as a constraint on the ability of states and local governments to finance education.

3. A third alternative would be to raise the hold-harmless protection percentage in the current formula—from 85 percent to 95 percent. This would slow the impact of the census change for the areas losing entitlements by about two additional years, although the eventual allocations would be the same.

PREFACE

This report summarizes the results of a study of the Education Consolidation and Improvement Act (ECIA) Chapter One formula for distributing federal compensatory education grants to local education agencies (LEAs). The study was conducted by staff of the Southeastern Regional Council for Educational Improvement at the request of the Council's 12 member states. The primary motive for the study was a shared concern about revisions of the LEA grants formula to include 1980 census data and the impact of those revisions upon educational programs and budget planning.

The 1980 census revealed a significant decline in the numbers of children aged 5-17 living in poverty level households in the Southeast.[1] Although the overall picture did not change appreciably—the greatest absolute and relative numbers of poor children are still located in the Southeast--the number of such children is an important element of the LEA grants formula, and education officials were concerned about possible declines in compensatory education grants. Therefore, they wanted to know the amounts of allocation decreases over the next several years, the changing pattern of funds distribution, and the identity of the most critical elements which influence funds allocation under the current formula.

Other questions raised were whether the present and forecast

distributions of funds under the present formula seemed consistent with the stated purposes of the compensatory education program and whether there might exist alternative distribution plans which would improve the ability of state and local education agencies to achieve the goals of the compensatory education program.

To provide the requested information to the states, the Council staff constructed a computer model of the LEA grants allocation formula. This model projects allocations at the county level for all 3,128 counties in the United States through 1987, based on various assumptions regarding budget levels. It is also used to examine the distributional effects of modifications to formula parameters. Projected allocations under the current formula and comparisons of alternatives are based on the data used for the present (1982-83) school year allocations as a frame of reference. Total appropriations are assumed constant at present year levels for analytical purposes.

Basic data for the formula model were provided by the Congressional Research Service. Additional information, advice, and data were graciously provided by Mr. Oliver Himley of the Iowa Department of Education; Dr. William Mellown and Ms. Mary Ellen Thomas of the Alabama Department of Education; Mr. Ellis Bateman of the Georgia Department of Education; Dr. Albert J. Comfort of the Mississippi Department of Education; Dr. Marshall Frinks, Mr. Steven Sauls, and Mr. Peter Leousis of the Florida Department of

Education; Dr. Joseph Webb, Dr. Weaver Rogers, and Ms. Ann Elmore of the North Carolina Department of Public Instruction; Dr. Jesse White and Dr. Stuart Rosenfeld of Southern Growth Policies Board; and Mr. John Wilson of Southern Governors' Association. Dr. Charles Law, Dr. Bernice Willis, Mr. Ron Conte, and Mr. George Anderson of the Council staff played important roles in developing the basic computer model of the formula and disseminating the allocation projections and descriptive material to the member states.

AN ANALYSIS OF THE ECIA CHAPTER ONE FORMULA FOR ALLOCATING COMPENSATORY EDUCATION GRANTS TO LOCAL EDUCATION AGENCIES

INTRODUCTION

Grants to state and local education agencies to support compensatory education represent the largest single category of federal aid to education. In fiscal year 1983, the federal budget for compensatory education programs exceeded three billion dollars--50 percent of all federal aid to elementary and secondary education[2]--over 80 percent ($2.7 billion) of which was targeted for local education agencies grants. These LEA entitlements are determined by a formula which considers poverty population and educational cost factors for each of the 3,128 counties in the United States (including the District of Columbia and Puerto Rico).[3] The effectiveness of that formula is the focus of concern of this report. ECIA Chapter One also provides for grants to education agencies in the Virgin Islands, American Samoa, the Marianas, Guam, and the Pacific Trust Territories, but grants to these areas are calculated apart from the formula affecting the states, District of Columbia, and Puerto Rico.

Federal compensatory education grants to local education agencies are authorized under Chapter One of the 1981 Education Consolidation and Improvement Act (ECIA) to continue through September 30, 1987.[4] ECIA Chapter One continued intact the previously existing programs established under Title I of the Elementary and Secondary Education Act (ESEA) of 1965.

Compensatory education is a term which describes a broad category of efforts to provide enriched educational experiences for educationally disadvantaged children. At the local level, educationally disadvantaged children are identified in terms of low achievement test scores and below grade level academic performance. More practical criteria are required, however, for allocating dollars at the federal and state levels, and economic disadvantage, rather than academic performance, is therefore used to guide the distribution of compensatory education funds to state and local education agencies. The rationale for the substitution of economic criteria for educational performance criteria is as follows: Economic deprivation is commonly viewed as a leading cause of poor academic performance. Therefore, large concentrations of poverty in the school age population can be expected to correlate closely with concentrations of educationally disadvantaged children.[5]

It can also be argued that the role of the national government to aid education is easier to justify in the context of federalist principles when the presence of educationally disadvantaged

children is related to economic disadvantages within the surrounding communities: States and local communities with large concentrations of poverty tend to be least able to provide for the educational needs of disadvantaged children. If one accepts the notion that an appropriate role for the federal government includes promoting national unity and general welfare, then it follows logically that federal compensatory education grants should be directed at children from economically deprived households in states where the degree and concentration of poverty limits local government fiscal capacity. Such grants are a way of promoting improved equality of economic opportunity between citizens of different states, thereby aiding the development of a more unified and prosperous national economy.

The relationship of economic deprivation to educational disadvantage and to limited local fiscal capacity—as a rationale for federal funding of compensatory education programs—is clearly expressed in the language of the ESEA Title I authorizing legislation:

> Section 101. In recognition of the special educational needs of children of low-income families and the impact that concentrations of low-income families have on the ability of local educational agencies to support adequate educational programs, the Congress hereby declares it to be the policy of the United States to provide financial assistance (as set forth in the following parts of this title) to local educational agencies serving areas with concentrations of children from low-income families to expand and improve their educational programs by various means (including preschool programs) which contribute particularly to meeting the educational needs of educationally deprived children. [6]

It seems clear from the language of the legislation that the link between educational disadvantage and economic conditions of the local community is an integral part of the rationale for federal policy in the compensatory education field, and that relationship should be remembered as a context for interpreting and evaluating the ways in which funds are distributed to implement the federal policy.

This report will examine the manner in which the stated federal policy for compensatory education has been implemented through the current formula for distributing grant entitlements to LEAs. The following section describes the specifics of the current formula; Section Three traces the history of changes in the formula; Section Four examines the distributional effects of the current formula; and Section Five presents conclusions regarding the consistency of current formula performance to perceived policy goals and offers suggested alternative formula specifications.

THE LEA GRANTS ALLOCATION FORMULA

The distribution of federal compensatory education grants under ECIA Chapter One is a two-stage process involving federal, state, and local education authorities.[7] The first stage involves a formula which uses numbers of children in poverty households and educational costs to determine grant entitlement amounts for each of the 3,128 counties in the United States. To obtain those funds, local education agencies must, in stage two, submit plans for specific educational programs or projects (within guidelines set by federal law) to benefit educationally disadvantaged children. The United States Department of Education calculates entitlements for LEA grants down to the individual county level using the formula based on poverty population and educational costs. The entitlements are summed for each state and passed to the state education agencies whose responsibility it is to review and approve LEA plans for compensatory education, to apportion entitlements among LEAs in counties with more than one public school system, and to act as fiscal agents to pass the grant monies through to the entitled LEAs.[8]

The curren' ECIA Chapter One LEA grant formula calculates the entitlement for each county by multiplying the number of eligible children in the county by an education cost factor specific to the state in which the county is located. The proportionate relation

of each county's product of cost and children to the national total of such multiplications defines the share of the total available grant funds to which LEAs in that county are entitled.

Eligible children include the following: (1) Children aged 5-17 living in families having income below the official poverty level (Orshansky Index) according to the most recent decennial census; (2) The number of children aged 5-17 in the most recent year for which data are available who live in families with income above the official poverty level but receiving payments under state administered Aid to Families with Dependent Children (AFDC) programs; and (3) The number of publicly supported children aged 5-17 in foster homes or institutions.

The largest group of children in the eligible total is the group defined by the decennial census as living in households with income below the official poverty level. In the 1982 formula, the number of eligible children defined by the decennial census accounted for 95.5 percent of the national total of eligible children.[9] The substitution of 1980 census data in the 1983 calculations will not change that proportion significantly. Children in above poverty level AFDC recipient households accounted for 1.9 percent nationally. Neglected, delinquent, and foster care children accounted for the remaining 2.6 percent. The national total number of eligible children used for the 1982 entitlements calculation was 8.7 million.[10] Table 1 shows the percentage

distribution of eligible children by state based on 1980 census data. Figure 1 summarizes the distribution of eligible children by regions of the country. The largest absolute number of children identified by the census as living in below-poverty-level households is found in the South. The children identified as eligible by the AFDC definition are concentrated in the urban areas of the Northeast.[11]

The number of eligible children in each county is multiplied by a cost factor that is specific to the state in which the county is located. The cost factor multiplication has been interpreted in previous studies as an attempt to adjust the distribution of funds to account for real differences between states' costs of providing educational services.[12] The cost factor used in the formula is 40 percent of each state's current per pupil expenditure amount during the most recently available year (usually the third previous year). However, no state's per pupil expenditure amount is entered at less than 80 percent nor more than 120 percent of the national average per pupil expenditure amount. Figure 2 shows the cost factor amount applied to each state by the current formula in 1982. The minimum of $694 is 40 percent of 80 percent of the national average per pupil expenditure and the maximum of $1,041 is 40 percent of 120 percent of the national average per pupil expenditure. The amounts used in the formula may change annually as per pupil expenditure information is updated.

TABLE 1

DISTRIBUTION OF LEA GRANTS FORMULA COUNT OF
ELIGIBLE CHILDREN INCLUDING 1980 CENSUS DATA BY STATE

State	Eligible Children	Percent of United States Total
Northeast		
Connecticut	72,521	.89
Maine	37,501	.46
Massachusetts	151,682	1.87
New Hampshire	18,046	.23
New Jersey	210,601	2.59
New York	695,068	8.56
Pennsylvania	323,050	3.98
Rhode Island	24,591	.30
Vermont	15,006	.18
Regional Total	1,548,066	19.06
North Central		
Illinois	344,115	4.24
Indiana	134,059	1.65
Iowa	67,029	.83
Kansas	50,738	.62
Michigan	295,153	3.63
Minnesota	90,829	1.12
Missouri	144,005	1.77
Nebraska	38,882	.48
North Dakota	19,306	.24
Ohio	285,284	3.51
South Dakota	29,014	.36
Wisconsin	106,196	1.31
Regional Total	1,604,610	19.76
South		
Alabama	200,677	2.47
Arkansas	112,379	1.38
Delaware	18,597	.23
District of Columbia	29,042	.36
Florida	331,706	4.09
Georgia	250,983	3.09

TABLE 1 (Cont'd)

State	Eligible Children	Percent of United States Total
Kentucky	169,476	2.09
Louisiana	223,533	2.75
Maryland	108,930	1.34
Mississippi	180,755	2.23
North Carolina	223,527	2.75
Oklahoma	93,895	1.16
South Carolina	144,845	1.78
Tennessee	197,247	2.43
Texas	575,022	7.08
Virginia	158,803	1.96
West Virginia	76,096	.94
Regional Total	3,095,513	38.12
West		
Alaska	10,726	.13
Arizona	91,114	1.12
California	745,050	9.18
Colorado	65,930	.81
Hawaii	23,665	.29
Idaho	28,448	.35
Montana	21,554	.27
Nevada	15,088	.19
New Mexico	65,605	.81
Oregon	57,050	.70
Utah	34,851	.43
Washington	91,436	1.13
Wyoming	7,731	.10
Regional Total	1,258,248	15.50
Puerto Rico	613,401	7.55
United States Total	8,119,838	100

N.B.: Percents do not total 100 due to rounding.

Source: United States Library of Congress, Congressional Research Service.

Regional Distribution of Eligible Children
in the LEA Grants Formula

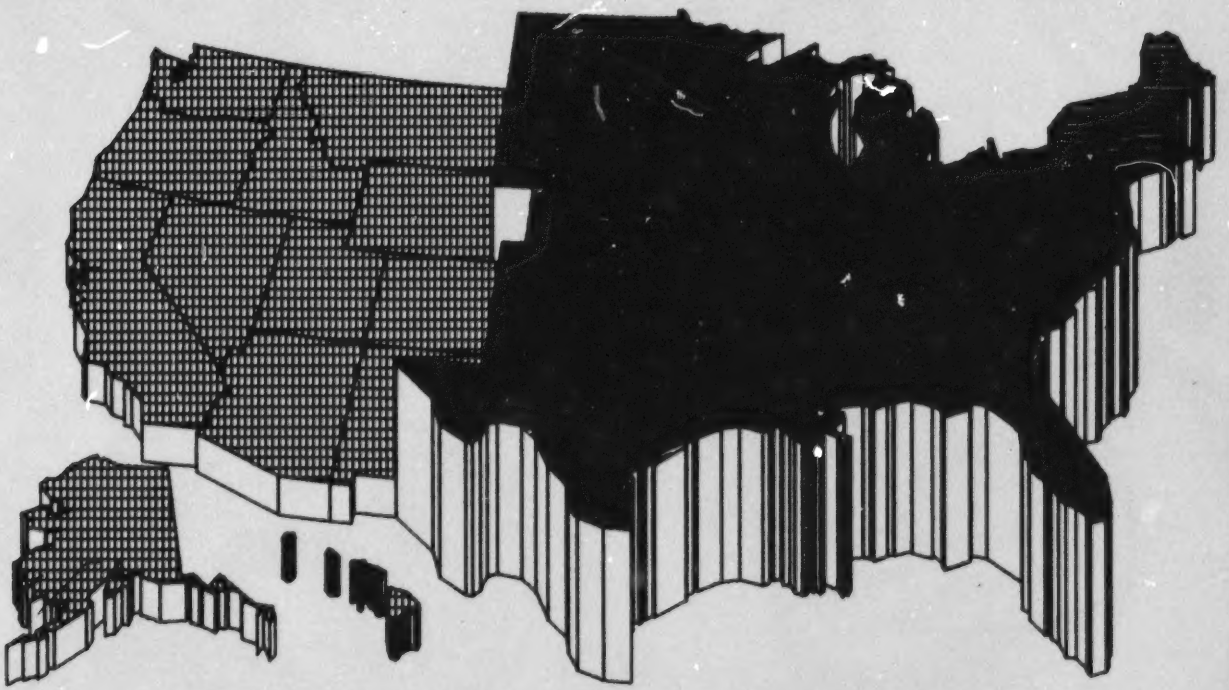

FIGURE 1

COMPARISON OF STATE COST FACTORS IN LEA GRANTS FORMULA

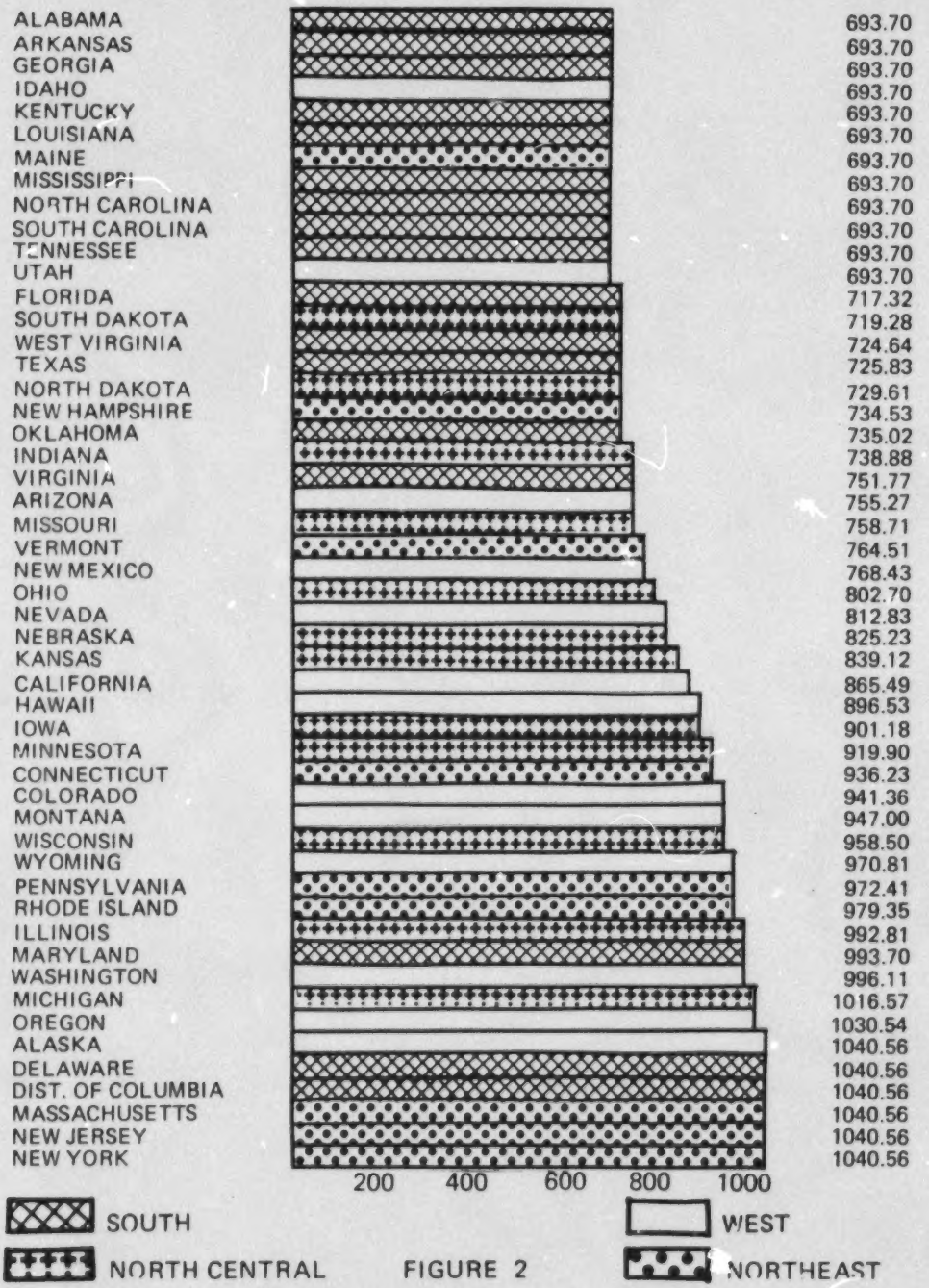

FIGURE 2

It was originally intended that each LEA's grant be 40 percent of the cost factor multiplied by the number of eligible ch ldren.[13] Such full funding would have required an appropriation of $7.5 billion for 1982-83, instead of the $2.5 billion actually appropriated. Actual distribution of grants requires rateably reducing each LEA full funding entitlement to accommodate the appropriation. Figure 3 shows the mathematical formula by which allocations are made.

Puerto Rico is treated in a special way by the existing formula. The number of eligible children in Puerto Rico (613,401) is multiplied by a cost factor which is 40 percent of 32 percent of the lowest per pupil expenditure among the 50 states. At present that computation results in a cost factor of $442 per child, compared to a minimum cost factor of $694 for the 50 states. The product of multiplying the cost factor by the number of children is the full funding entitlement for Puerto Rico. As with county entitlements for the 50 states, the full funding entitlement is rateably reduced to accommodate the actual appropriation.

The final important element of the formula for allocating LEA grants is the so-called "hold-harmless" provision. This part of ECIA Chapter One provides that no county entitlement shall be less than 85 percent of the entitlement amount for the county in the previous year.[14] Its purpose is to limit the fiscal shock to ongoing programs when formula data change by slowing the

FIGURE 3

THE FORMULA FOR DISTRIBUTION OF ECIA CHAPTER ONE LEA GRANT ENTITLEMENTS AT THE COUNTY LEVEL

$$Gi = \frac{B \times (.40 \times Ei \times (Ci + Ai + Ni + Fi))}{\sum_{j=1}^{3128} (.40 \times Ej \times (Cj + Aj + Nj + Dj + Fj))}$$

Where G = Grant to county i

B = Total budget appropriation

Ei = Cost factor for state in which county i is located

Ci = Eligible children by census data in county i

Ai = Eligible children by AFDC data in county i

Ni = Neglected children publicly supported in county i

Di = Delinquent children in institutions in county i

Fi = Children in foster homes publicly supported in county i

j = Index identifying each county successively

The formula above represents the procedure that is used in practice. The LEA grants program has never been funded in the federal budget at the full level implied by the original act. The act intended a straightforward entitlement of 40 percent of the state per pupil expenditure (adjusted to the 80 percent and 120 percent of national average per pupil expenditure limits) for each eligible child in a county. If the program had been funded at a level sufficient to provide full grants for each eligible child, the total appropriation for the 1982-83 school year would have been approximately $7.5 billion instead of the $2.5 actually appropriated. The elements in the mathematical expression of the formula provide for proportionately adjusting the distribution of entitlements to accommodate the reduced funding level of the grants program.

reallocation process. Thus, it is an important consideration in evaluating the effects on funding distribution of switching from 1970 census data to 1980 census data. To take into account the full effect of the hold-harmless provision, the computer model projected the distribution of the 1982-83 level of funding through the 1987-88 school year. Only by the latter year will all hold-harmless protections have been exhausted and the full impact of the data change felt.

There is one additional feature of the formula that deserves brief mention. This applies only to the distribution of entitlements when the total appropriation for the grants program exceeds the level appropriated in fiscal year 1979 ($2.33 billion). The 1978 ESEA Amendments, subsequently subsumed under ECIA Chapter One, provided that the portion of the total appropriation that is in excess of the 1979 amount be divided into two equal parts.[15] One half of the excess is to be distributed according to the original formula described above. The other half is to be distributed to each state on the basis of the 1975 Survey of Income and Education (SIE) estimates of numbers of children aged 5-17 in each state who live in households with incomes below 50 percent of the national median income for 1975. The educational cost factor (40 percent of per pupil expenditure within the 80 percent - 120 percent of national average limits) is multiplied by the number of children in each state identified under the SIE definition. The resulting

product is the basis for proportionately distributing among the states the entitlement amounts for the second half of the excess appropriation. These entitlements are then divided among the counties in each state in proportion to the entitlements determined for each county by the original formula.

A 1977 report of the National Institute of Education, "Title I Funds Allocation: The Current Formula," discussed the SIE data and its possible use in the formula for grants entitlement distribution.[16] That study described the SIE data as a means of updating the formula prior to the 1980 census to reflect significant changes in the numbers and locations of children in poverty since the 1970 census data were collected. In the 1982-83 school year, the amount distributed on the basis of the SIE formula was $28.6 million--only one percent of the total amount distributed. For that reason, and because this report assumes continued funding at the 1982-83 level, the SIE formula has been ignored in this analysis of entitlements distribution. However, if appropriations for the program are increased significantly in future years the effect of the SIE formula will become worthy of careful examination.[17]

LEGISLATIVE HISTORY OF THE LEA GRANTS DISTRIBUTION FORMULA

The current formula for distributing federal compensatory education grants to LEAs dates back to the 1978 Amendments to the Elementary and Secondary Education Act.[18] The formula was previously amended in 1970 and 1974.[19] The original formula was approved in the first authorization of ESEA in 1965.[20] Both the cost factor and the definition of eligible children have been changed extensively over time. The continuing history of revisions to the formula suggest a fundamental dissatisfaction of policy makers with the results of the formula distribution process. And it is worth noting that the changes in the formula have tended to shift the distribution of funds according to clear regional patterns.

The original version of the formula, passed in 1965, provided for grants to be distributed on the basis of the number of children identified by the 1960 census as living in households having income below the poverty level of $2,000. It was apparent that timeliness of data was a concern from the beginning. The 1965 law provided that the census data would be updated each year by also adding into the count of eligibles the number of children in households receiving AFDC payments. To avoid double counting of census and AFDC children, only children in AFDC-receiving households with incomes above the $2,000 poverty line were to be counted in the AFDC data.

The number of children counted under the AFDC eligibility definition was initially small (only 10 percent of the national total of eligibles in 1966), but grew rapidly in the late 1960s and early 1970s. By 1974 the number of children identified under the AFDC definition was 60 percent of the total. The 1965 law also provided for the number of eligible children in each LEA to be multiplied by 50 percent of the state per pupil expenditure or 50 percent of the national average per pupil expenditure, whichever was highest, and there was no maximum per pupil expenditure rate. According to the 1974 report of the House Education and Labor Committee, this payment procedure was a source of "grave inequities. . . because there is no maximum amount which a state can receive, this aspect of the formula has also contributed to a distortion in the distribution of Title I funds among the states. New York, for instance is eligible to receive $772 per child while California is eligible to receive only $465."[21]

The growth of the proportion of AFDC children in the formula had a significant impact on the distribution of funds, shifting them away from the patterns of poverty indicated by the 1960 and 1970 censuses. The changing effect of the AFDC data on the distribution of funds did not reflect real shifts in the location of economically deprived children. It primarily reflected the ability of some states to pay higher AFDC benefits than other states.[22] The result was to take compensatory education

entitlements away from states with the greatest poverty and least fiscal capacity and transfer the grant entitlements to wealthier areas which had greater fiscal capacity. The 1970 Amendments to Title I attempted to partially remedy this inequity by increasing the poverty level for defining eligible AFDC children from $2,000 to $4,000. Unfortunately, the increase was set on a graduated schedule and was tied to increases in the total appropriation for the grants program. (This latter provision was apparently designed to protect the areas that had benefited by use of the AFDC data from the "fiscal shock" of a sudden reallocation of funds.) However, because appropriations for the program were not increased at the rate anticipated in 1970, the shift to the higher census poverty lines was not implemented. Funds continued to be distributed in a way that penalized poorer states through 1974.

The 1974 Amendments to Title I attempted to remedy the inequities which Congress perceived in the operation of the formula in two ways: by reducing the significance of AFDC children in the formula and by limiting the range of variation in the payment rate between states.[23] The 1974 law adopted the Orshansky Index of poverty as the basis for determining the number of eligible children in each jurisdiction. This index provides a sliding scale of poverty based on family size and urban or rural residence. In 1970, for example, a child from a household of four persons with income less that $3,743 counted as an eligible child for

determining compensatory education grants entitlements. The significance of AFDC data was reduced by counting only two-thirds of children in AFDC households, and then only if income was above the Orshansky poverty level as adjusted for inflation since 1970. Under this new formula, the total number of AFDC children of all eligible children was reduced to under five percent. However, the definitions used reintroduced some double counting of census and AFDC eligibles.

The 1974 Amendments changed the calculation of the LEA grants payment rate. An upper limit of 120 percent of the national average per pupil expenditure rate was added. The payment rate was changed to 40 percent of the state per pupil expenditure for states in which per pupil expenditure was between 80 percent and 120 percent of the national average. Otherwise, the payment would be 40 percent of 80 percent of the national average (for low expenditure states) or 40 percent of 120 percent of the national average (for high expenditure states).[24] It is noteworthy that prior to this amendment the low expenditure states received payment based on 100 percent of the national average per pupil expenditure. Thus, the 1974 changes lowered the payment rate for all of the below national average expenditure states as well as the states where per pupil expenditure had been above 120 percent of the national average. The net effect of the 1974 Amendments was to shift funds toward the Northeast region.

Prior to the 1974 Amendments Puerto Rico received funds under a special set-aside apart from the formula allocation calculations. This remains the procedure for the Virgin Islands and other territories, but since 1974 Puerto Rico has been included under the formula calculation. A lower cost factor is applied to Puerto Rico.

An 85 percent hold-harmless provision was also introduced with the 1974 Amendments, guaranteeing that no jurisdiction's entitlement would be less than 85 percent of the amount received during the previous grant year. This provision was designed to protect school districts from a precipitous decline in program support funds as a result of formula and data changes.

The 1978 Amendments to Title I reflected a continuing concern to ensure timeliness of the data used for calculating grant entitlements and to achieve equity in the distribution of total available funds. The count of AFDC children was changed to include all rather than two-thirds of such children. This change adjusted the distribution of entitlements slightly back toward the states with greatest fiscal capacity. The amendments also provided that half of the funds appropriated above the 1979 level would be distributed in proportion to the number of children identified as economically deprived according to the 1975 Survey of Income and Employment (SIE). The SIE data were described as a means of updating the formula for shifts in poverty populations since the

1970 census without waiting for the results of the 1980 census.[25] The fact that only a fraction of the funds were to be distributed using the SIE data is indicative of inadequacies that were perceived in those data from the beginning.[26]

The Education Consolidation and Improvement Act (ECIA) of 1981 continued the 1978 amended LEA grants formula intact in its Chapter One. The distribution of funds continued to be calculated on the basis of the 1970 census data through the allocations for the 1982-83 school year. However, a supplemental appropriation for the 1982-83 school year was added to the entitlements for areas that would have received more had 1980 census data been used. The actual allocations for 1982 shown in this report include the supplemental appropriation amounts. It is expected that the allocations for the 1983-84 school year will be based on the use of 1980 census data completely. The effects of distribution of entitlements under the current formula using 1980 census data are examined in the next section.

DISTRIBUTIONAL EFFECTS OF THE CURRENT LEA GRANTS FORMULA

It is anticipated that the appropriation for the 1983-84 school year (fiscal year 1983) will be the first to be distributed using 1980 census data exclusively. In 1982, only the supplemental appropriation of $148 million was distributed according to the 1980 census results. The shift from one census basis to another will cause significant changes in the distribution of grants in 1983 compared to previous years. Based on forecasts generated by the computer model of the formula, 25 states, the District of Columbia, and Puerto Rico will lose entitlement amounts compared to 1982 funding levels. However, the full impact of the change will only begin to be evident in the 1983-84 school year allocations. Hold-harmless provisions will delay the final impact of the shift until the 1987-88 school year, although most of the change will be concentrated in the first two years of the period.

Table 2 compares the 1982 allocation of LEA grants (based primarily on 1970 data) by states to the forecast allocations for 1983 and successive years (based on use of 1980 census data).[27] The forecast allocations for school years 1983-84 through 1987-88 show what would happen to the distribution of funds if the same total amount is appropriated in each successive year as was actually appropriated in fiscal year 1982, and the effects of fully replacing 1970 census data with 1980 census data. The table

TABLE 2

CHAPTER ONE ECIA LEA GRANTS DISTRIBUTION ANALYSIS
EXISTING FORMULA ALLOCATIONS
USING 1980 CENSUS DATA FOR 1983-87

State	Actual 1982-83	Forecast 1983-84	Forecast 1987-88	Percent Change 1982-87
Alabama	65,381,543	56,524,027	53,760,168	-18
Alaska	5,031,256	4,760,301	4,310,188	-14
Arizona	23,730,592	25,638,212	26,575,330	12
Arkansas	37,516,904	32,854,360	30,103,786	-20
California	227,226,213	240,353,213	249,015,934	10
Colorado	24,891,933	24,177,238	23,966,454	-4
Connecticut	23,560,898	25,294,306	26,218,854	11
Delaware	6,686,661	7,209,587	7,473,109	12
District of Columbia	13,669,949	11,258,850	11,670,379	-15
Florida	85,529,000	88,975,158	91,875,001	12
Georgia	72,697,567	68,880,663	67,235,773	-8
Hawaii	7,185,742	7,904,451	8,193,371	14
Idaho	7,009,562	7,372,405	7,621,049	9
Illinois	120,731,620	128,573,598	131,933,018	9
Indiana	35,209,411	37,155,498	38,252,622	9
Iowa	23,958,175	23,312,929	23,327,360	-3
Kansas	19,286,883	17,570,632	16,437,239	-15
Kentucky	50,882,793	46,700,510	45,401,606	-11
Louisiana	74,379,817	66,224,959	59,881,278	-19
Maine	9,573,204	9,903,009	10,046,293	5
Maryland	41,835,807	41,139,540	41,799,797	0
Massachusetts	53,510,902	58,813,655	60,949,020	14
Michigan	103,751,981	112,306,786	115,863,823	12
Minnesota	35,091,087	32,754,503	32,264,711	-8
Mississippi	62,603,832	54,117,614	48,423,183	-23
Missouri	47,154,794	43,086,677	42,193,417	-11
Montana	8,670,548	8,093,920	7,882,594	-9
Nebraska	13,903,135	13,300,340	12,391,244	-11
Nevada	4,242,553	4,579,834	4,736,120	12
New Hampshire	4,527,618	4,938,452	5,118,960	13

TABLE 2 (Cont'd)

State	Actual 1982-83	Forecast 1983-84	Forecast 1987-88	Percent Change 1982-87
New Jersey	74,063,298	81,638,102	84,622,104	14
New Mexico	21,625,495	20,019,557	19,463,458	-10
New York	245,391,768	269,454,893	279,303,898	14
North Carolina	75,219,307	66,193,995	59,874,045	-20
North Dakota	6,973,426	6,195,531	5,439,693	-22
Ohio	82,716,483	85,573,986	88,429,906	7
Oklahoma	31,498,016	27,614,170	26,650,205	-15
Oregon	21,611,469	21,968,184	22,702,106	5
Pennsylvania	113,240,559	117,516,723	121,294,350	7
Puerto Rico	93,227,000	91,885,000	92,121,640	-1
Rhode Island	8,857,394	9,227,223	9,300,481	5
South Carolina	49,713,052	42,907,514	38,803,109	-22
South Dakota	8,854,550	8,384,933	8,059,292	-9
Tennessee	59,641,965	54,140,150	52,840,755	-11
Texas	164,631,557	162,851,129	161,174,506	-2
Utah	8,447,488	9,053,877	9,336,374	11
Vermont	4,071,797	4,288,453	4,430,364	9
Virginia	56,513,610	50,523,703	46,102,457	-18
Washington	32,786,572	34,098,255	35,173,520	7
West Virginia	27,038,617	23,988,737	21,294,892	-21
Wisconsin	38,758,499	38,773,573	39,303,041	1
Wyoming	3,540,249	3,230,737	2,898,419	-18

Source: Southeastern Regional Council staff forecasts based on Congressional Research Service current allocation and census data.

Note: The 1982 actual allocation includes the original amount distributed using the 1970 census data plus a supplemental amount distributed to jurisdictions that were improved by use of 1980 census data.

reveals a significant pattern of reallocation of entitlements to LEA grants. Figure 4 shows the relative percentage changes in grant allocations among the states which result from the shift from 1970 to 1980 census data.

The changes in state totals of entitlements range from gains of 14 percent for Massachusetts, Hawaii, New Jersey, and New York to losses of 23 percent for Mississippi, 22 percent for North Dakota and South Carolina, and 21 for West Virginia. There is a clear regional pattern to the allocation shifts. Six of the ten states with largest percentage forecast gains are located in the northern industrial tier of states. These states have traditionally been characterized by relatively high expenditures for education and above average fiscal capacities of state and local governments. Eight of the ten states with the greatest percentage losses of entitlements are located in the southeastern region.

The loss of LEA grants in many states beginning in 1983 may be characterized as an example of "fiscal shock." In some states, the loss of funds in the first two years after the change to 1980 census data is quite large in proportion to total grants and total education budgets. In Alabama, for example, the first year loss will be 14 percent of the previous budget for federally supported compensatory education programs. Like many southern states, Alabama does not have the fiscal capacity to replace such a

Forecast Changes in LEA Grants from 1982 to 1987

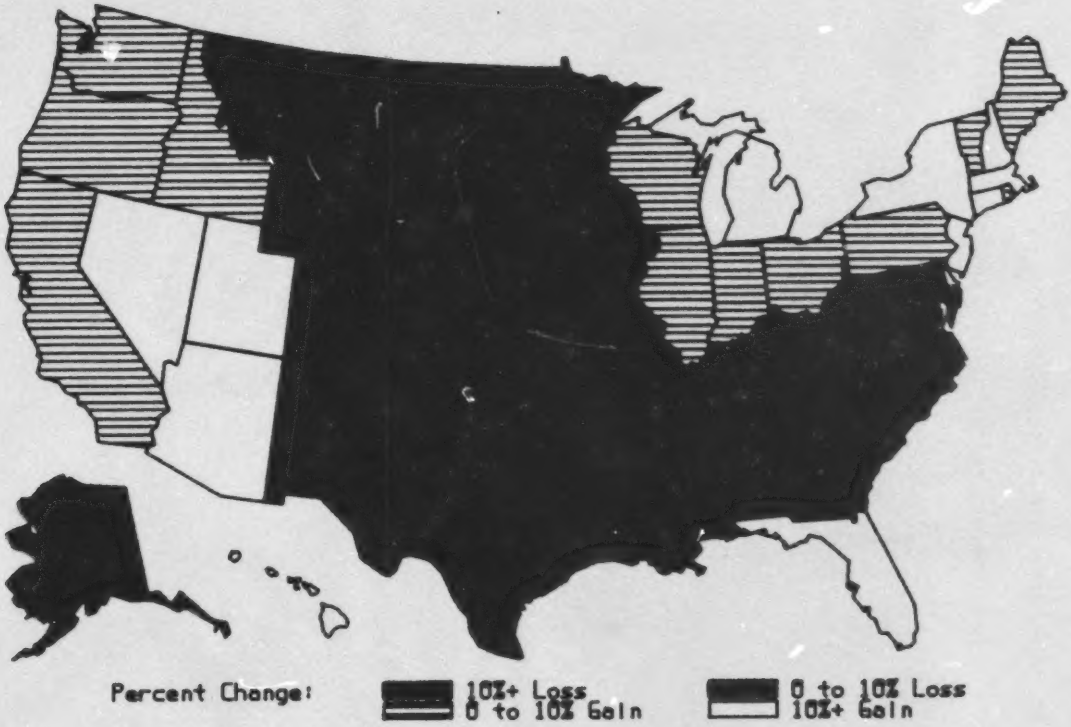

FIGURE 4

sizeable loss of funds. The result will be a significant reduction in services to economically and educationally deprived children.

An important feature of the current formula is that the cost factor used does not make allowance for the limited fiscal capacities of areas having high concentrations of children from poverty households. The cost factor is derived from per pupil expenditure amounts for each state, yet most states with low per pupil expenditure also have low per capita income—an indicator of limited government fiscal capacity. States which benefit from the highest cost factors under the formula tend to be those with higher than average per capita personal income, indicative of high fiscal capacity to support education from local resources.

Although the "hold-harmless" provision was designed to prevent fiscal shock to LEAs when formula data changed, the shifts of funds described in Table 2 indicate a fundamental shortcoming of that provision in the current formula. It seems likely that the current 85 percent "hold-harmless" provision was designed to accommodate a situation in which only a few LEAs face grants reductions. In that circumstance it might be reasonable to expect the state to provide some assistance to maintain ongoing programs. Unfortunately, the actual result of the data changes is that, in some states, almost every LEA faces loss of grants, and there is little possibility for states to replace such massive losses.

Paradoxically, the region with the greatest projected funding

losses remains the region with the greatest absolute and relative numbers of economically deprived children. Although, since the 1970 census, the total number of poor children in southern states has fallen, 38 percent of all such children in the nation still reside in the 16 states and District of Columbia classified as Census South. If Puerto Rico is included, the proportion becomes 45 percent. In 1983 the biggest gains in compensatory education funding will accrue to states in the Northeast census area. Since 1970, the number of poor children in this region has risen. According to the 1980 census, 19 percent of the national total of eligible children reside in that region.

Table 3 shows the forecast 1983 distribution of funds by state in comparison to the distribution of eligible children based on the 1980 census. The regional percentages from Table 3 are shown in Figure 5. The data show that while the South contains 38 percent of the nation's economically deprived children, the states in that region will receive only 35.6 percent of available compensatory education funds. The Northeast region, with 19 percent of the eligible children will receive 22.8 percent of the available funds for compensatory education programs next year. As hold-harmless protections drop out of effect during the next several years, the South's percent of available funds will drop further to 33 percent and the Northeast's percent will rise to 25 percent. The North Central and West census regions will receive percentages of

TABLE 3

COMPARISON OF DISTRIBUTION OF FORECAST
LEA GRANTS FUNDS FOR 1983 TO DISTRIBUTION OF ELIGIBILE CHILDREN
IN CURRENT FORMULA BY STATE AND REGION

State	Percent of Forecast Grants	Percent of Elibible Children	Forecast Grant Dollars per Eligible Child
Northeast			
Connecticut	1.00	.89	362
Maine	.39	.46	268
Massachusetts	2.32	1.87	402
New Hampshire	.19	.23	284
New Jersey	3.22	2.59	402
New York	10.64	8.56	402
Pennsylvania	4.47	3.98	375
Rhode Island	.36	.30	378
Vermont	.16	.18	295
Regional Total	22.75	19.06	
North Central			
Illinois	5.08	4.24	383
Indiana	1.47	1.65	285
Iowa	.92	.83	348
Kansas	.69	.62	324
Michigan	4.43	3.63	393
Minnesota	1.29	1.12	355
Missouri	1.70	1.77	293
Nebraska	.52	.48	319
North Dakota	.24	.24	268
Ohio	3.38	3.51	310
South Dakota	.33	.36	278
Wisconsin	1.52	1.31	370
Regional Total	21.57	19.76	
South			
Alabama	2.23	2.47	268
Arkansas	1.29	1.38	268
Delaware	.28	.23	402

TABLE 3 (Cont'd)

State	Percent of Forecast Grants	Percent of Eligible Children	Forecast Grant Dollars per Eligible Child
District of Columbia	.44	.36	402
Florida	3.51	4.09	277
Georgia	2.71	3.09	268
Kentucky	1.84	2.09	268
Louisiana	2.61	2.75	268
Maryland	1.62	1.34	384
Mississippi	2.13	2.23	268
North Carolina	2.61	2.75	268
Oklahoma	1.11	1.16	284
South Carolina	1.69	1.78	268
Tennessee	2.14	2.43	268
Texas	6.43	7.08	280
Virginia	1.99	1.96	290
West Virginia	.96	.94	280
Regional Total	35.59	38.12	
West			
Alaska	.18	.13	402
Arizona	1.01	1.12	292
California	9.49	9.18	334
Colorado	.95	.81	364
Hawaii	.31	.29	346
Idaho	.30	.35	268
Montana	.32	.27	366
Nevada	.18	.19	314
New Mexico	.80	.81	297
Oregon	.87	.70	398
Utah	.36	.43	268
Washington	1.24	1.13	385
Wyoming	.12	.10	375
Regional Total	16.13	15.5	
Puerto Rico	3.62	7.55	154
United States Total	100	100	

N.B.: Percents may not add to 100 percent due to rounding.

Regional Distribution of Forecast 1983 LEA Grants

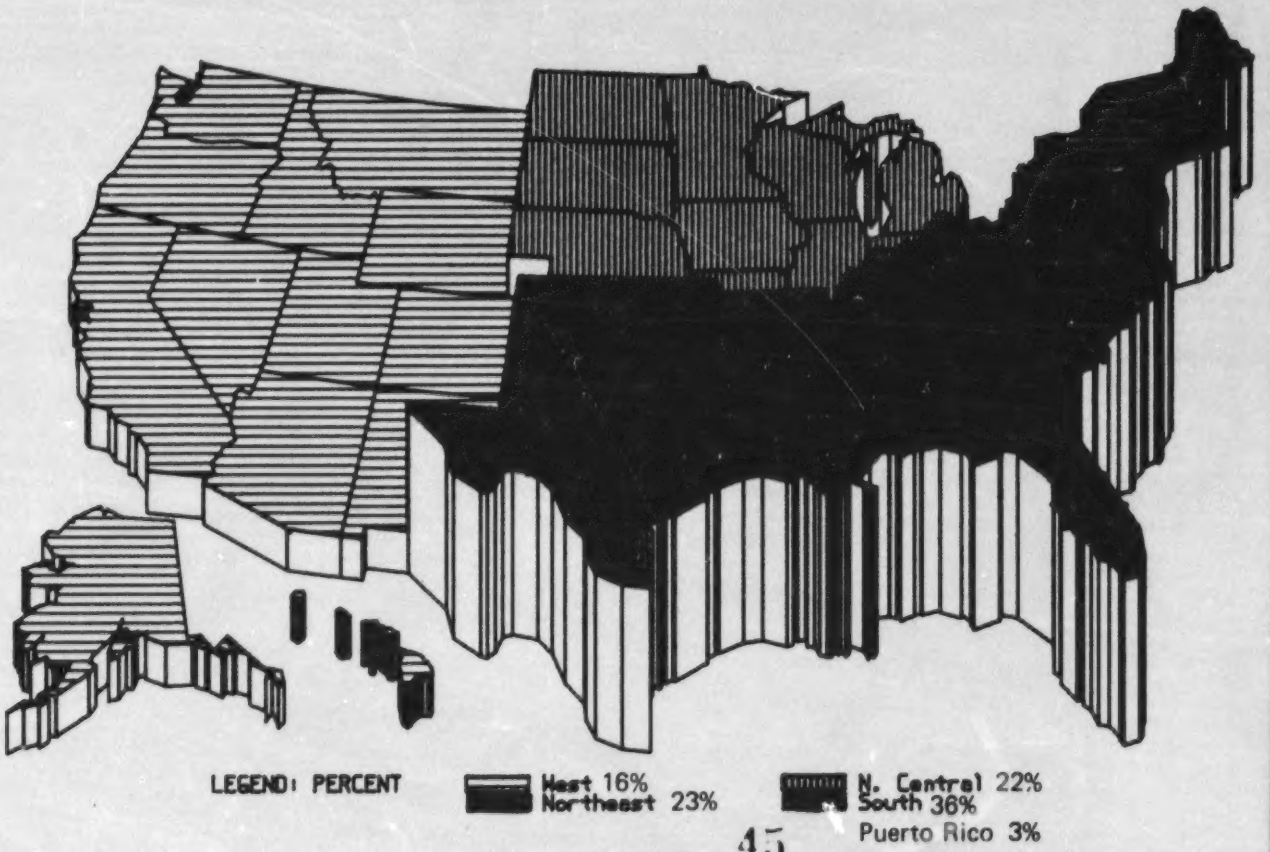

FIGURE 5

available funds approximately equal to their percentages of eligible children. The low cost factor applied to Puerto Rico results in funds per eligible child ($154) being less than half of the United States average.

Another important aspect of the distribution of grants under the current formula is the relationship of entitlements to the concentration of economically deprived children. Concentration means more than absolute numbers of economically deprived children: It refers to the relative proportion of these children to the total school age population. The Congressional policy statement which prefaces the act authorizing federal grants for compensatory education refers specifically to the negative effect of concentrations of economically deprived children on local capacity to finance adequate education.[28] The fiscal limits imposed by high concentrations of economically deprived children are regularly cited as a rationale for federal involvement in compensatory education.

Table 4 shows the relationship of concentration rates (economically deprived children as a proportion of total school age children) to the share of LEA grant entitlements by state. These data, shown in Figure 6, reflect state concentration ratio rankings. Data were not available to calculate concentration ratios for Puerto Rico, the Virgin Islands, and the Pacific Trust Territories. The data in Figure 6 indicate that the current formula does not yield a consistent relationship between the

TABLE 4

COMPARISON OF DISTRIBUTION
OF LEA GRANTS TO CONCENTRATION
RATES OF ELIGIBLE CHILDREN BY STATE

State	Forecast Percent of 1987 LEA Grants	Concentration Ratio of Eligible Children to School Age Population
Alabama	2.20	.23
Alaska	0.18	.12
Arizona	1.09	.16
Arkansas	1.23	.23
California	10.20	.16
Colorado	0.98	.11
Connecticut	1.07	.11
Delaware	0.31	.15
District of Columbia	0.48	.28
Florida	3.76	.19
Georgia	2.75	.21
Hawaii	0.34	.12
Idaho	0.31	.13
Illinois	5.40	.15
Indiana	1.57	.12
Iowa	0.96	.11
Kansas	0.67	.11
Kentucky	1.86	.22
Louisiana	2.45	.24
Maine	0.41	.16
Maryland	1.71	.12
Massachusetts	2.50	.13
Michigan	4.75	.15
Minnesota	1.32	.11
Mississippi	1.98	.31
Missouri	1.73	.15
Montana	0.32	.13
Nebraska	0.51	.12
Nevada	0.19	.10
New Hampshire	0.21	.09
New Jersey	3.47	.14

TABLE 4 (Cont'd)

State	Forecast Percent of 1987 LEA Grants	Concentration Ratio of Eligible Children to School Age Population
New Mexico	0.80	.22
New York	11.44	.20
North Carolina	2.45	.18
North Dakota	0.22	.14
Ohio	3.62	.13
Oklahoma	1.09	.15
Oregon	0.93	.11
Pennsylvania	4.97	.14
Rhode Island	0.38	.13
South Carolina	1.59	.21
South Dakota	0.33	.20
Tennessee	2.16	.21
Texas	6.60	.19
Utah	0.38	.10
Vermont	0.18	.14
Virginia	1.89	.15
Washington	1.44	.11
West Virginia	0.87	.19
Wisconsin	1.61	.11
Wyoming	0.12	.08

COMPARISON OF CONCENTRATIONS OF ELIGIBLE CHILDREN BY STATE

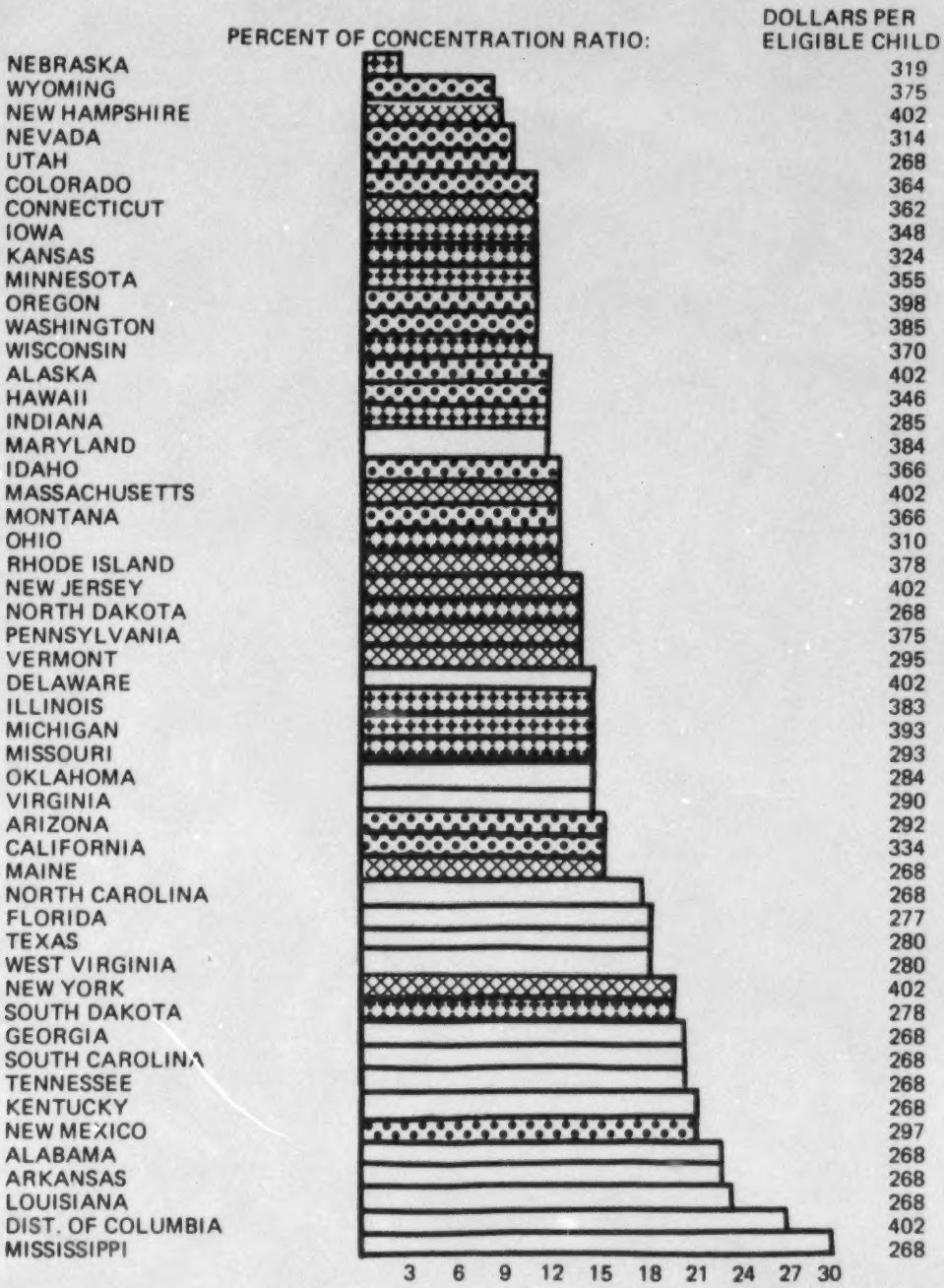

FIGURE 6

concentrations of economically deprived children and the distribution of entitlements. In fact, the number of dollars available per eligible child appears to be inversely related to the concentration of such youngsters. This is not a new conclusion—it has been found in previous studies by the House Committee on Education and Labor.[29] Nor is it surprising, since the current formula distributes entitlements in proportion to absolute numbers of eligible children only and does not include any variable which recognizes relative concentrations of economically deprived children.

Besides the definition of eligible children, the most critical factor affecting the distribution of funds under the current formula is the payment rate applied to the local counts of eligibles. The differences between percentages of eligible children and percentages of funds allocated by region illustrates the importance of the differential payment rate. While the geographic shift in the absolute numbers of poor children between 1970 and 1980 (the number in the Northeast rising and the number in the South falling) accounts for a decrease in grants to the South and an increase for the Northeast, the magnitude of the funding shift is largely the result of regional differences in payment rates. The southern states typically have the lowest per pupil expenditures in the nation while those in the northeastern states are above average. The high payment rates used to determine

entitlements for LEAs in the Northeast magnifies and increases the allocative effect of the population shift.

Figure 7 illustrates the state to state variation in the 1987 forecast allocation per eligible child which would result from distribution of the 1982 total appropriation based on 1980 census data. It shows the allocation per eligible child in 1987 varying from a low of $268 (in Alabama, Arkansas, Georgia, Idaho, Kentucky, Louisiana, Maine, Mississippi, North Carolina, South Carolina, Tennessee, and Utah) to a high of $402 (in Alaska, Delaware, District of Columbia, Massachusetts, New Jersey, and New York). The average allocation per eligible child in the United States would be $325.

The relative effects of the payment rate differences can be seen by comparing what each state would receive under the current formula to the amount that would be received if funds were distributed on an equal payment rate basis ($325 per eligible child). For example, New York has 695,068 eligible children and eventually will receive $279,304,000 annually (or $402 per eligible child), based on the 1982 appropriation total. If payment rates were equalized, New York would receive only $225,897,000, a reduction of $53,407,000 or 19 percent of New York LEAs' total projected entitlements. In other words, 19 percent of New York's LEA grant amounts are attributable to the application of differential payment rates derived from per pupil expenditure differences between

FORECAST 1987 ALLOCATIONS PER ELIGIBLE CHILD

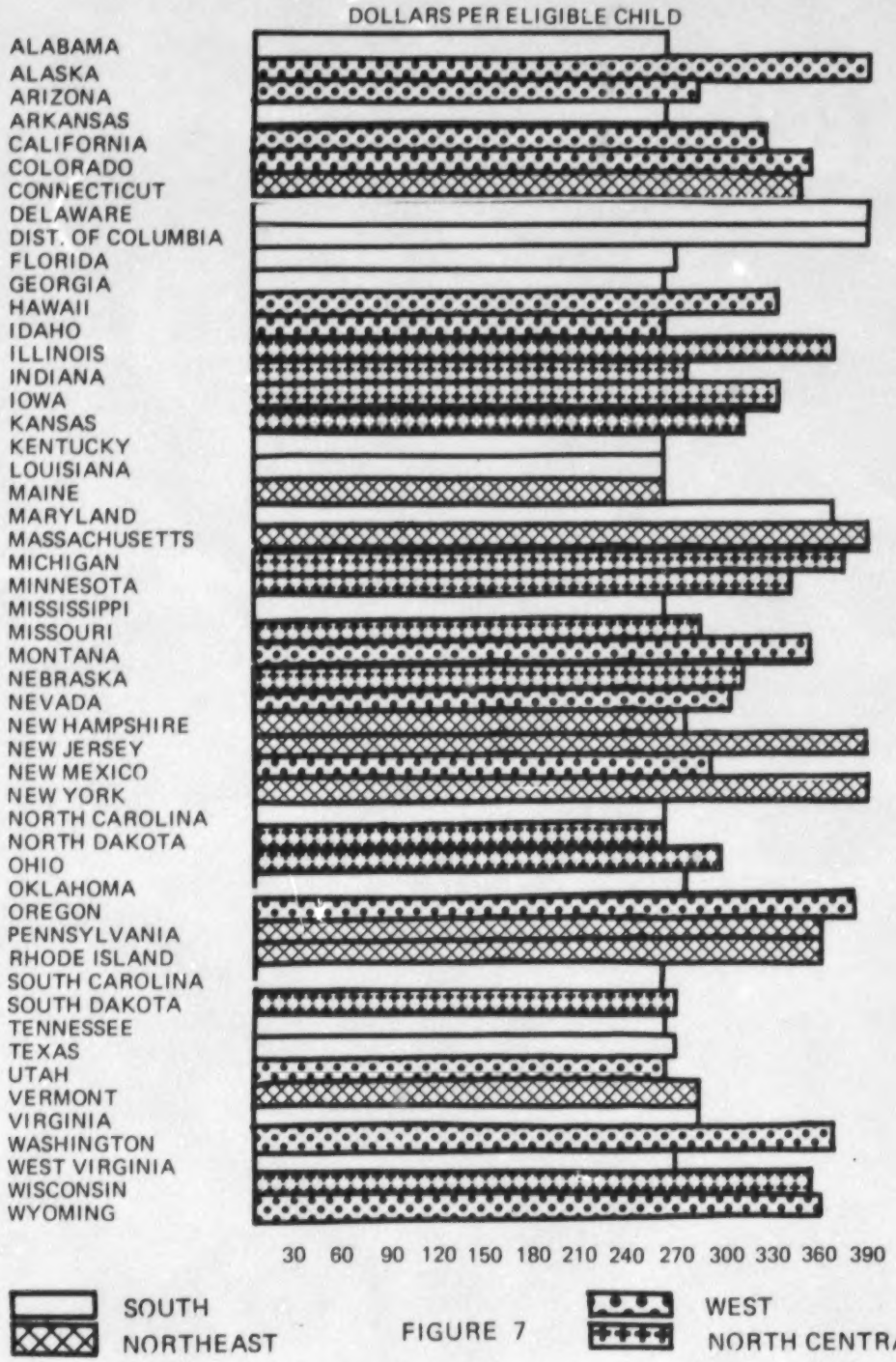

FIGURE 7

states. In contrast, Mississippi's total forecast entitlement of $48,423,000 would be increased to $58,745,000 if payment rates were equal. The difference of $10,322,000, or 18 percent of the equal payment total, is the penalty imposed on Mississippi by the differential payment rates used in the current formula. Table 5 (p. 42) compares the projected allocations for each state under the current formula (at 1982 funding levels) to the entitlement that would result from the use of equal payment rates. Puerto Rico was omitted from the "no-cost-factor" hypothetical allocation because the special provisions for Puerto Rico in the present formula are dependent on the cost factor element. Instead, it was assumed in this and subsequent comparisons of formula alternatives that funds would be set aside to ensure Puerto Rico of receiving at least its present allocation of $93,227,000.

The data in Table 5 show a clear pattern of regional differences. States in the Northeast tend to receive a bonus under the current differential payment rate procedure while states in the South are penalized. Previous studies of the LEA grants distribution formula have suggested that differences in the real cost of delivering educational services form the rationale for differential payment rates.[30] Since the Northeast is generally perceived as having a higher cost of living than the South, this would seem to be a plausible basis for differential payment rates. However, one must ask whether the resulting payment rate differences accurately

reflect state and regional cost of living and cost of government services differences. Under the current formula, the difference between the payment rates for New York state ($402) and Georgia ($268) is great: New York's rate is 150 percent of Georgia's. In contrast, the metropolitan cost of living index difference between New York City and Atlanta, for example, is only four percent.[31] While metropolitan cost of living index differences are an imperfect measure of regional cost differences, they do offer a point of reference. Thus, the real cost difference between the two cities is not likely to be even close to the payment rate difference created by the current formula for distributing LEA grants. The formula payment rate is based on differences in reported per pupil expenditure. But, such differences represent more than just differences in the real cost of providing educational services. They reflect variations in the amount and types of educational services which different states choose to buy as well as differences in state record keeping and reporting practices. The way in which equipment expenditure is classified, for example, or the manner of funding personnel benefits can affect the reported per pupil expenditure.

Per pupil expenditure differences do correlate highly with differences in the fiscal capacity of states to fund educational programs. A widely accepted measure of fiscal capacity is per capita personal income. States with relatively high per capita

TABLE 5

COMPARISON OF LEA GRANTS FORECAST FOR 1987
UNDER CURRENT FORMULA TO GRANTS BASED ON NO COST
FACTOR DIFFERENCES BY STATE

State	Forecast Current Formula	Forecast No Cost Factor
Alabama	53,760,168	65,185,878
Alaska	4,310,188	3,417,986
Arizona	26,575,330	29,541,166
Arkansas	30,103,786	36,377,138
California	249,015,934	242,188,733
Colorado	23,966,454	21,240,342
Connecticut	26,218,854	23,437,619
Delaware	7,473,109	5,859,404
District of Columbia	11,670,379	9,277,390
Florida	91,875,001	107,666,563
Georgia	67,235,773	81,543,383
Hawaii	8,193,371	7,568,397
Idaho	7,621,049	9,033,249
Illinois	131,933,018	111,816,975
Indiana	38,252,622	43,457,252
Iowa	23,327,360	21,728,626
Kansas	16,437,239	16,357,505
Kentucky	45,401,606	54,931,920
Louisiana	59,881,278	72,510,134
Maine	10,046,293	11,962,951
Maryland	41,799,797	35,400,570
Massachusetts	60,949,020	49,316,657
Michigan	115,863,823	95,947,754
Minnesota	32,264,711	29,541,166
Mississippi	48,423,183	58,838,190
Missouri	42,193,417	46,631,096
Montana	7,882,594	6,835,972
Nebraska	12,391,244	12,451,235
Nevada	4,736,120	4,882,837
New Hampshire	5,118,960	5,859,404
New Jersey	84,622,104	68,359,723
New Mexico	19,463,458	21,240,342
New York	279,303,898	225,831,227
North Carolina	59,874,045	72,510,134
North Dakota	5,439,693	6,103,546

TABLE 5 (Cont'd)

State	Forecast Current Formula	Forecast No Cost Factor
Ohio	88,429,906	92,773,909
Oklahoma	26,650,205	30,517,733
Oregon	22,702,106	18,554,781
Pennsylvania	121,294,350	104,981,003*
Puerto Rico	92,122,000	93,227,000
Rhode Island	9,300,481	7,812,539
South Carolina	38,803,109	46,875,238
South Dakota	8,059,292	9,277,390
Tennessee	52,840,755	63,965,169
Texas	161,174,506	187,012,670
Utah	9,336,374	11,230,525
Vermont	4,430,364	4,638,695
Virginia	46,102,457	51,513,934
Washington	35,173,520	29,541,166
West Virginia	21,294,892	24,658,328
Wisconsin	39,303,041	34,424,003
Wyoming	2,898,419	2,441,418
United States Total	2,533,418,680	2,533,418,680

*Arbitrary set-aside at 1982 level

STATE PER CAPITA PERSONAL INCOME AS A PERCENT OF U.S. AVERAGE

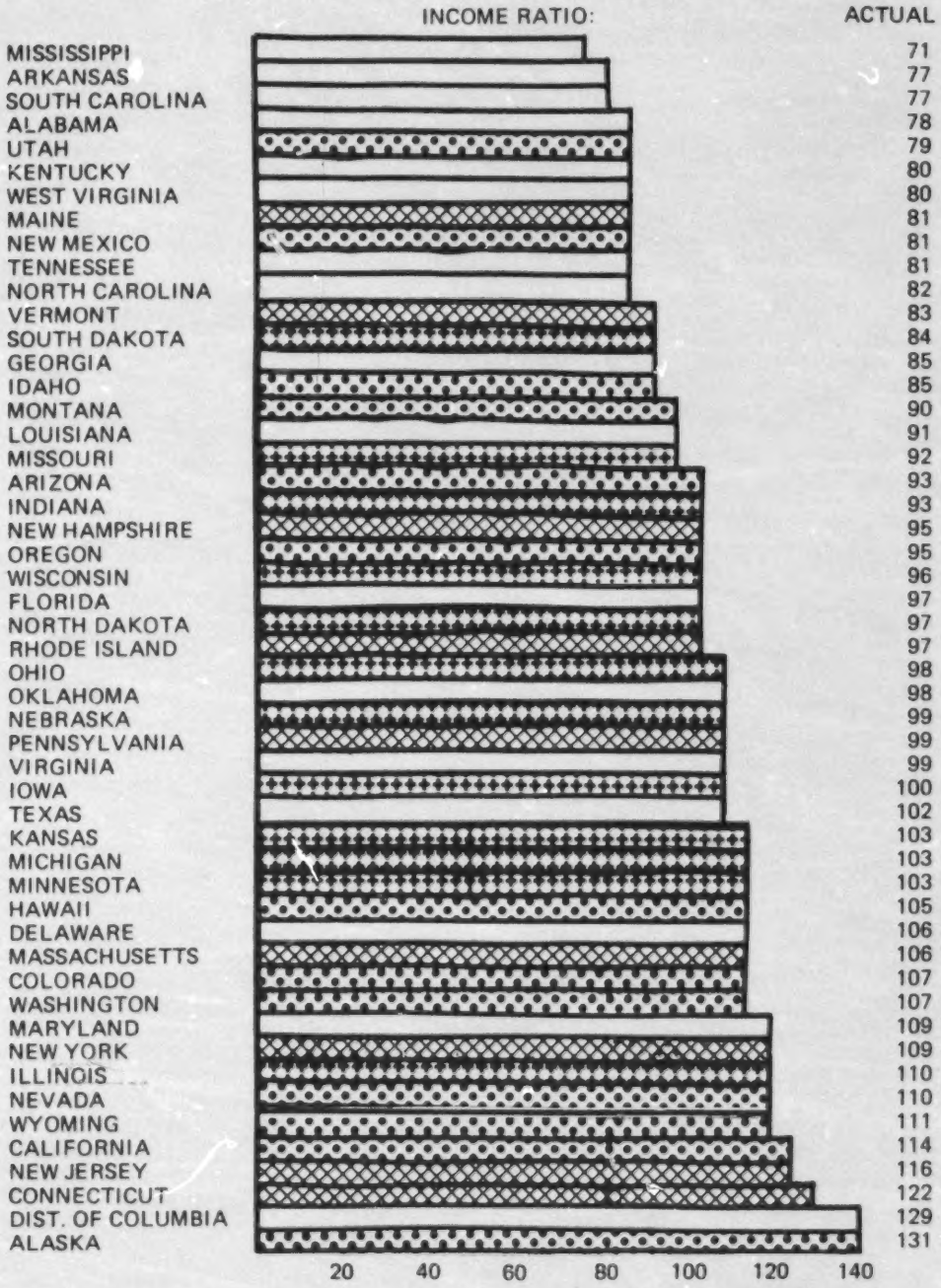

FIGURE 8

personal incomes tend to be better able to generate tax revenues to pay for educational services than states with lower per capita personal incomes. There is significant variation in per capita personal income by state within the United States. In 1980, it ranged from a low of $6,580 in Mississippi to a high of $12,790 in Alaska. The national average per capita personal income was $9,521. Figure 8 shows each state's per capita personal income as a percentage of the national average. A comparison of Figure 8 with Figure 7 reveals a close relationship between states with low payment rates under ECIA Chapter One and states with low per capita income. The operation of the formula seems to contradict the concern for fiscal capacity expressed in the opening section of the authorization legislation. Seven of the ten states which will lose the greatest percentages of their total grants in 1983 are also among the ten lowest ranked states in terms of per capita personal income.

CONCLUSION

Examination of the distribution of LEA grant entitlements under the current formula reveals several areas of concern:

- The fiscal shock which the formula allows in connection with data updating;
- The inverse relationship between proportionate concentrations of economically disadvantaged youngsters and allocations per eligible child;
- The reliance on per pupil expenditure data as a proxy for cost differences; and
- The inverse relationship between allocation per eligible child and fiscal capacity of state and local governments.

These issues will be discussed here in the context of identifying possible formula modifications to better implement perceived policy goals.

One of the most critical shortcomings of the current formula is the cost factor element. The large differences in per pupil expenditure between states produce a significant discrepancy between the location of the children the law is intended to serve and the distribution of funds. Additionally, the formula fails to address the problem of concentrations of poor children relative to total school population, an element which is an important basis for federal involvement. In fact, the distribution of funds under the

current formula actually runs counter to concentration patterns. A final significant shortcoming of the current formula is the inadequacy of the hold-harmless provision to protect LEAs from sudden budget disruptions as a result of the change from 1970 to 1980 census data.

While SIE data do not significantly affect the present distribution of funds, their use is an additional problem area for the current formula. Since 1980 census data are now available, the logic for use of the SIE part of the formula as an updating element has disappeared. Relative to the 1980 census, the SIE data are now obsolete and their use in the formula ties the distribution of funds to an irrelevant and untimely data base. Only a small portion of the total grants is now distributed by the SIE data, but the SIE element could have a significant effect on allocations if the total appropriation for the LEA grants program is increased.

There are a number of possible alternatives for modifying the current formula to overcome the problems that have been identified. The computer model developed by the Southeastern Regional Council staff to forecast grants distribution trends was also used to analyze the results of several alternative modifications to the current formula. Two of these are discussed here along with their resulting allocation forecasts. The first directly modifies the cost factor computation and the second adjusts the formula by per capita income to indicate fiscal capacity.

Since the cost factor based on per pupil expenditure is identified as a source of mismatch between need and funds allocation, a direct modification of that element in the formula might be the simplest approach to improving the allocation of grants. It was pointed out that the per pupil expenditure data used in the formula overstate the actual educational cost differences between states. That overstatement can be reduced by merely narrowing the limits presently used to translate per pupil expenditure into the formula cost factor for each state. Currently, the formula provides that the cost factor is based on state per pupil expenditure, but not less than 80 percent nor more than 120 percent of the national per pupil expenditure average.

Table 6 shows the effect of narrowing that limitation range to a minimum of 90 percent and a maximum of 115 percent of the national average per pupil expenditure. The comparison in Table 6 is for 1987 allocations (a point at which hold-harmless effects of the switch from 1970 to 1980 data will have disappeared) of a total budget amount based on the 1982 actual appropriations. That modification would shift funds away from the Northeast and West and toward the Southeast and Midwest in comparison to the eventual effect of the current formula. However, even the states that would lose relative to the current formula result would generally not drop below their present (school year 1982-83) allocation levels. The states which would gain relatively would not generally rise

TABLE 6

COMPARISON OF FORECAST 1987 LEA GRANTS DISTRIBUTION
BASED ON CURRENT FORMULA TO DISTRIBUTION BASED ON
FORMULA WITH COST FACTOR LIMITS NARROWED TO 90 PERCENT
AND 115 PERCENT OF NATIONAL AVERAGE PER PUPIL EXPENDITURE

State	Forecast LEA Grants Under Current Formula	Forecast LEA Grants With Adjusted Cost Factor Limits in Formula
Alabama	53,760,168	58,802,012
Alaska	4,310,188	4,015,964
Arizona	26,575,330	26,698,059
Arkansas	30,103,786	32,927,040
California	249,015,934	242,001,696
Colorado	23,966,454	23,291,371
Connecticut	26,218,854	25,480,325
Delaware	7,473,109	6,962,977
District of Columbia	11,670,379	10,873,731
Florida	91,875,001	97,182,414
Georgia	67,235,773	73,541,413
Hawaii	8,193,371	7,962,582
Idaho	7,621,049	8,335,781
Illinois	131,933,018	128,216,751
Indiana	38,252,622	39,281,726
Iowa	23,327,360	22,670,279
Kansas	16,437,239	15,974,238
Kentucky	45,401,606	49,659,551
Louisiana	59,881,278	65,497,184
Maine	10,046,293	10,988,475
Maryland	41,799,797	40,622,388
Massachusetts	60,949,020	56,788,496
Michigan	115,863,823	110,502,305
Minnesota	32,264,711	31,355,884
Mississippi	484,23,183	52,964,503
Missouri	42,193,417	42,196,085
Montana	7,882,594	7,660,558
Nebraska	12,391,244	12,042,210
Nevada	4,736,120	4,602,714
New Hamsphire	5,118,960	5,287,806
New Jersey	84,622,104	78,845,600
New Mexico	19,463,458	19,218,477

TABLE 6 (Cont'd)

State	Forecast LEA Grants Under Current Formula	Forecast LEA Grants With Adjusted Cost Factor Limits in Formula
New York	279,303,898	260,237,957
North Carolina	58,874,045	65,489,273
North Dakota	5,439,693	5,657,009
Ohio	88,429,906	85,939,028
Oklahoma	26,650,205	27,510,892
Oregon	22,702,106	21,358,072
Pennsylvania	121,294,350	117,877,751*
Puerto Rico	92,122,000	93,227,000*
Rhode Island	9,300,481	9,038,507
South Carolina	38,803,109	42,442,220
South Dakota	8,059,292	8,501,629
Tennessee	52,840,755	57,796,373
Texas	161,174,506	168,486,340
Utah	9,336,374	10,211,977
Vermont	4,430,364	4,397,031
Virginia	46,102,457	46,530,996
Washington	35,173,520	34,182,759
West Virginia	21,294,892	22,297,512
Wisconsin	39,303,041	38,195,960
Wyoming	2,898,419	2,816,777
United States Total	2,533,418,680	2,533,418,680

*Arbitrary set-aside at 1982 funding level

above their present allocation levels.

The allocation for Puerto Rico was not derived using the modified formula. Instead, the Puerto Rico allocation was set-aside at the 1982 level. This approach provided a small increase to Puerto Rico. Based on the wording of the present formula, Puerto Rico would not seem to benefit from a modification of the cost factor calculation limits applied to states unless the provision for calculating the special Puerto Rico cost factor is changed.

The second alternative modification is shown by the forecast allocation amounts in Table 7. It is based on the ratio of per capita personal income (in 1980) for each state to the national average per capita personal income. The modification is made by dividing the per pupil expenditure amount for each state by the ratio of per capita income for that state to the national average. These ratios are shown in Figure 8 (see page 44). Again, Puerto Rico was allotted a set-aside at the 1982 funding level and not incorporated in the modified formula. This approach was necessary to simplify the computer model algorithm. In cases where the per capita income is less than 80 percent of the national average, the ratio of .80 was substituted to be consistent with the lower limit on the per pupil expenditure entry in the formula. Like the previous modification this one shifts the projected distributions in favor of the Southeast and some Midwest states, but generally more

so. The logic in favor of this modification is that it recognizes fiscal capacity as a constraint on the ability of states and local governments to finance education. This limited fiscal capacity is the effect of poverty concentration to which the policy statement of the original act alluded.

One additional formula modification alternative is worth noting, although it was not analyzed using the distribution model. That would be to raise the hold-harmless protection percentage in the current formula. Presently each LEA is guaranteed 85 percent of the previous year's allocation. Under the present formula the adjustment from 1970 to 1980 data will cause a significant fiscal shock to LEAs in the poorest parts of the nation. If the hold-harmless percentage were set at 95 percent of the previous year's allocation, the impact of the census change would be slowed for the areas losing entitlements. The eventual allocation of funds would be the same but full adjustment to the eventual levels would be delayed about two years.

Compensatory education grants comprise not only the largest federal aid program to local public schools, but one of the most complex and sensitive. Thus, demographic and economic shifts effect the program's implementation and efficacy. Despite its complexity, however, the formula has a simple and explicit intent: to recognize "the special educational needs of children of low-income families and the impact that concentrations of low-income

TABLE 7

COMPARISON OF FORECAST DISTRIBUTION OF LEA GRANTS UNDER CURRENT FORMULA TO DISTRIBUTION UNDER A FORMULA USING PER CAPITA INCOME AS A FISCAL CAPACITY ADJUSTMENT FACTOR

State	Forecast LEA Grants Under Current Formula	Forecast LEA Grants With Per Capita Income Adjustment
Alabama	53,760,168	63,141,266
Alaska	4,310,188	3,284,706
Arizona	26,575,330	28,527,736
Arkansas	30,103,786	35,356,868
California	249,015,934	218,068,974
Colorado	23,966,454	22,361,019
Connecticut	26,218,854	21,454,849
Delaware	7,473,109	7,038,288
District of Columbia	11,670,379	9,031,644
Florida	91,875,001	94,557,769
Georgia	67,235,773	78,968,351
Hawaii	8,193,371	7,790,134
Idaho	7,621,049	8,950,914
Illinois	131,933,018	119,738,112
Indiana	38,252,622	41,062,922
Iowa	23,327,360	23,288,268
Kansas	16,437,239	15,931,741
Kentucky	45,401,606	53,324,143
Louisiana	59,881,278	65,693,328
Maine	10,046,293	11,799,362
Maryland	41,799,797	38,284,173
Massachusetts	60,949,020	57,402,717
Michigan	115,863,823	112,300,638
Minnesota	32,264,711	31,272,467
Mississippi	48,423,183	56,872,982
Missouri	42,193,417	45,785,553
Montana	7,882,594	8,743,760
Nebraska	12,391,244	12,495,433

TABLE 7 (Cont'd)

State	Forecast LEA Grants Under Current Formula	Forecast LEA Grants With Per Capita Income Adjustment
Nevada	4,736,120	4,298,348
New Hampshire	5,118,960	5,379,350
New Jersey	84,622,104	72,827,839
New Mexico	19,463,458	22,859,813
New York	279,303,898	255,812,695
North Carolina	59,874,045	70,322,009
North Dakota	5,439,693	5,598,533
Ohio	88,429,906	90,083,382
Oklahoma	26,650,205	27,148,515
Oregon	22,702,106	23,856,906
Pennsylvania	121,294,350	122,314,226*
Puerto Rico	92,122,000	93,227,000*
Rhode Island	9,300,481	9,572,057
South Carolina	38,803,109	45,574,214
South Dakota	8,059,292	9,465,631
Tennessee	52,840,755	62,061,417
Texas	161,174,506	157,749,419
Utah	9,336,374	10,965,652
Vermont	4,430,364	5,203,458
Virginia	46,102,457	46,490,099
Washington	35,173,520	32,817,361
West Virginia	21,294,892	25,010,831
Wisconsin	39,303,041	40,872,059
Wyoming	2,898,419	2,606,812
United States Total	2,533,418,680	2,533,418,680

*Arbitrary set-aside at 1982 funding level

families have on the ability of local education agencies to support adequate educational programs" by providing these children and their communities with financial assistance.

It seems that where need (i.e., concentrations of poor children) are greatest, proportionately greater funding support should be available. The alternative formula modifications described above illustrate three methods to bring the formula in line with the intent of the legislation.

FOOTNOTES

[1]Census of the Population 1970, 1980. Bureau of the Census data as reported on magnetic tapes furnished by Congressional Research Service.

[2]"177 Million Added for Chapter I." Education Week, September 22, 1982.

[3]Twenty United States Statutes 2143, Title I, Sections 111-127. Hereafter cited as "1978 Amendments."

[4]Twenty United States stat. 3801 (Pub. L. 97-35).

[5]National Institute of Education. Title I Funds Allocation: The Current Formula. Washington: United States Government Printing Office, 1977. Hereafter cited as "1977 NIE Report."

[6]1978 Amendments, Section 101.

[7]1977 NIE Report, p. 2.

[8]1977 NIE Report, pp. 4-5.

[9]Data furnished by Congressional Research Service.

[10]Note: 1970 census data were used to allocate the basic appropriation for the 1982-83 supplemental appropriation; used 1980 census data to distribute additional funds only to districts that would have received more had 1980 census data been used originally.

[11]1977 NIE Report, pp. 32-33.

[12]1977 NIE Report, p. 34.

[13]United States House of Representatives, Committee on Education and Labor. "Elementary and Secondary Education Amendments of 1974: Report." 93rd Congress, Second Session, Report No. 93-805, p. 9. Hereafter cited as 1974 Congressional Report.

[14]1978 Amendments, Section 126.

[15]1978 Amendments, Section 117.

[16]1977 NIE Study, pp. 73-74.

[17] 1977 NIE Study, p. 74.

[18] 1977 NIE Report, p. 2.

[19] 1974 Congressional Report, p. 10.

[20] 1974 Congressional Report, p. 11.

[21] 1977 NIE Report, p. 32.

[22] 1974 Congressional Report, p. 13.

[23] 1974 Congressional Report, pp. 12-14.

[24] 1977 NIE Report, p. 37.

[25] See discussion of non-comparability problems in 1977 NIE Report, pp. 36-38.

[26] The model assumes level continuation of 1982 funding to provide comparability of effects.

[27] 1978 Amendments, Section 101.

[28] 1977 NIE Study, p. 36.

[29] 1974 Congressional Report, p. 10.

[30] 1974 Congressional Report, p. 10.

[31] 1981 Statistical Abstract of United States, p. 470.